Initial Study/Environmental Assessment

Construct a Median Barrier on Route 1 and Widen the Inside Shoulders

Prepared pursuant to the California Environmental Quality Act
(Division 13 of the Public Resources Code)

1.0 Purpose and Need for Proposed Project

Caltrans proposes to construct a thrie beam median barrier and widen the inside shoulders from 0.6m (2ft) to 1.5m (5ft) on Route 1, between Fremont Street Overcrossing and 1.3 kilometers (0.81 miles) north of Ord Village Overhead KP 125.9/R131.2 [Post Miles 78.20 to 81.50].

The purpose of the project is to prevent cross median accidents within the project limits. This median barrier project was triggered by both the increasing traffic flow along this segment of Route 1 and the listing of this location in Caltrans' 1997 Median Barrier Monitoring System Report (MBMSR).

1.1 Project Summary

The project would place a double thrie beam median barrier in the median throughout the job except at three locations. It is proposed to place two rows of single thrie beam median barrier to preserve existing vegetation from the Del Monte Overhead to approximately 305 meters (1000 feet) south, from the Route 1/218 Separation to approximately 183 meters (600 feet) south and all locations where sandmat manzanita is present would have a two row single thrie beam median barrier envelope around it. All other crossings would have a standard envelope (defined on p. iii).

In addition to the above improvements there are various other locations, outside the median area, that would be improved. Some of these include upgrading bridge approach guardrails, replacing non-standard dikes, and replacing lined ditches with buried pipe.

1.2 Safety

The existing median does not contain a median barrier to prevent cross median accidents. The 1997 Median Barrier Monitoring System Report indicates that this section of freeway meets volume/median width criteria for a median barrier. Additionally, the 5-year cross median accident rate (accidents per mile per year) from January 1, 1992 to December 31, 1996 in the proposed project limits is as follows:

	FATAL	TOTAL
Actual	0.06	0.06
Average	0.12	0.50

During this period there were 2 cross median accidents, 1 of which was fatal. The proposed project would alleviate or eliminate these cross median traffic accidents.
Also, the total accident rate for this section of Route 1 from February 28, 1992 to February 28, 1997 was less than the statewide average. There were a total of two hundred thirty-six (236) accidents, of these, seventy-seven (77) resulted in injuries and 5 were fatal.

2.0 Alternatives Analysis

2.1 Preferred Project Alternative

The preferred project Alternative 3 proposes to construct a double thrie beam median barrier and widen the inside shoulders from 0.6m (2ft) to 1.5m(5ft). The double thrie beam median barrier would be installed throughout the job except at three locations. It is proposed to place two rows of single thrie beam median barrier to preserve the existing vegetation from the Del Monte Overhead to approximately 305 meters (1000 feet) south, from the Route 1/218 Separation to approximately 183 meters (600 feet) south and at the northern end of the project, all locations where sandmat manzanita is present would have a two row single thrie beam median barrier envelope around it. All other crossings would have a standard envelope (defined on p. iii).

2.2 Alternatives Considered and Rejected

Seven alternatives for the construction of median barriers and widening of shoulders were considered early in the project development process before the decision was made to proceed with the preferred alternative. These alternatives did not meet the project objectives nor had aesthetic constraints that made them infeasible. The following alternatives are described below:

Alternative 1 - Construct thrie beam median barrier and widen the inside shoulders from 0.6m (2ft) to 1.5m(5ft) and the outside shoulders from 2.4m(8ft) to 3.0m(10ft).

Alternative 2 - Construct a concrete median barrier and widen the inside shoulders from 0.6m (2ft) to 1.5m(5ft) and the outside shoulders from 2.4m(8ft) to 3.0m(10ft).

Alternative 4 - Construct a concrete median barrier and widen the inside shoulders from 0.6m(2ft) to 1.5m(5ft).

Alternative 5 - Construct a thrie beam median barrier with no shoulder widening.

Alternative 6 - Construct a concrete median barrier with no shoulder widening.

Alternative 7 - Place temporary railing (type K) as well as concrete median barrier. Also, widen the inside shoulders from 0.6m(2ft) to 1.5m(5ft).

All project alternatives allow safety upgrades recommended by the safety analysis report. These upgrades include: gore area removal, removing and placing dikes, placing drainage structures and removing or relocating trees. Additionally, potholing would be required to locate high-pressure gas mains and electrical lines.